

Dr R J W Rees CMG

A Retirement Tribute

The face of leprosy research has undergone a complete transformation from the grey days of the 1920's and 30's, when leprosy was of all diseases the most isolated from the main stream of medicine and of no appreciable interest to medical research workers as a whole. A small but highly dedicated company of leprosy specialists did, however, keep the flame of research alight, and British leprosy workers were prominent among them, fostered over many years by the British Leprosy Relief Association. Leonard Rogers, Ernest Muir, John Lowe, Gordon Ryrie and Robert Cochrane were all well-known pioneers in the specialty. Rogers' and Muir's *Leprosy* was the standard textbook for over 20 years from 1926. This group, in common with international colleagues from across the world were almost all of them first and foremost clinicians, as were their immediate successors. While able to bring highly sensitive powers of observation to clinical and pathological aspects of leprosy, they were in the very nature of things unable significantly to penetrate the fundamental mystery at the heart of the disease, namely the precise nature of the leprosy bacillus and its behaviour in the human body in relation to the body's defences.

By the 1950's things were changing. The science of microbiology was expanding rapidly. Cochrane's *Practical Textbook of Leprosy*, published in 1947, and still more, the first edition of his *Leprosy in Theory and Practice* published in 1959 presented leprosy in a manner entirely in line with current thinking in general medicine, so robbing the disease of its isolation and awakening the interest of specialists in other disciplines to the fascinating problems posed by almost every aspect of leprosy. It was at this opportune moment that the decision was taken to add a leprosy unit to the existing celebrated tuberculosis department at the National Institute for Medical Research at Mill Hill, London. Equal wisdom and foresight were displayed in the decision not to introduce a specialist leprologist from overseas, but instead to give responsibility to Dr Rees, a brilliant member of the scientific staff of the Institute since 1947; an expert in the microbiology and pathology of tuberculosis. Dr Rees was thus able to approach leprosy problems both with an entirely open mind and against a firm background of general medicine.

It quickly became apparent that a new star had arisen in the leprosy firmament, and one of first magnitude. Under Dr Rees' leadership the leprosy

unit soon established a reputation of the highest order, and the reasons are not far to seek.

1 Based on the standards already attained in tuberculosis research, the leprosy unit was able to establish a level of technical excellence that immediately placed it in the top rank of leprosy research centres in the world. One cannot recall a single instance over the past 20 years in which a hasty judgement or technical inadequacy challenged the authority of the unit, which thus became an extremely important reference point for leprosy workers everywhere.

2 Dr Rees could easily have devoted his time to esoteric research of harmless academic interest. Instead he chose immediately to address himself to the intensely practical and difficult problems confronting field workers, which for decades had been evocative of diverse and sometimes contradictory judgements on important issues. He established a mouse colony and proceeded to confirm Shepard's astonishing findings on the limited but significant growth of *Mycobacterium leprae* in the mouse footpad. This was then carried further, using thymectomized and irradiated mice, in which he was able to observe a form of leprosy closely akin to human lepromatous leprosy, and several important points of pathological and immunological interest resulted.

With Dr D'Arcy Hart a method was devised for the accurate counting of *M. leprae*. Equally important, the morphology of living bacilli, as distinct from dead bacilli, was clearly established, settling an argument that had been going on for decades.

This firm bacteriological foundation opened up new levels of precision in chemotherapeutic research, and Dr Rees now turned his attention to this crucial subject. A Medical Research Council Field Research Unit was opened at Sungei Buloh in Malaysia in the charge of Dr Michael Waters; another at Addis Ababa under Dr John Pearson, and more recently, a third at Hyderabad in South India. A long series of highly important studies followed on the assessment of various types of chemotherapy in leprosy, studies which have had a great influence on current thinking on these subjects. Just at the time when Dr Rees began his leprosy studies, the first significant evidence began to arise of drug resistance to dapsone. His bacteriological work formed a reliable basis for the study of this ominous phenomenon and he applied himself to this with a vigour commensurate with its great importance, and with conspicuous success.

The early 1970's provided an opportunity for studies on the nasal discharge in leprosy, in which the writer was one of those able to work with Dr Rees from the uniquely placed independent field centre at Dichpalli, Central India. These shed important new light on the transmission of leprosy, all made possible by the unimpeachably high standard of the Mill Hill laboratory.

In 1969, Dr Rees had been officially appointed Head of the Laboratory for Leprosy and Mycobacterial Research at Mill Hill. By 1973 he was at the height of his authority as a research scientist in leprosy. The Centenary International Leprosy Congress was held at Bergen that year and Dr Rees was a central figure,

contributing to no less than 15 scientific papers, all of them important, a great tribute to his scientific acumen and energy.

Typical of his scientific alertness was his subsequent visit to the Gulf Southern Research Institute, USA to see for himself the work of Dr E Storrs on the nine-banded armadillo, a new experimental animal of potential importance, and to study its husbandry in captivity. The result was the establishment at Mill Hill of one of the first experimental armadillo colonies outside America.

3 Only passing reference is made here to Dr Rees' important contribution on the international level. For the past 20 years no congress or consultation on leprosy and related aspects of tropical medicine has been complete without his participation. In one international leprosy congress after another the microbiology section has owed a great deal to his sound judgement and up to the moment contribution. He has been an indispensable member of medical boards and the councils of organizations connected with leprosy, including the Expert Leprosy committees of the World Health Organization; member of Council of the International Leprosy Association; associate editor of the *International Journal of Leprosy*; chairman of the LEPROA Medical Advisory Board and vice-chairman of the editorial board of *Leprosy Review*.

4 Quite integral to this record of achievement is the personality of Dr Rees. It cannot have been an easy decision for him to accept a career in leprosy research. It was a career offering no open door to fame and fortune. Leprosy is too closely associated with the world's poor and rejected to offer lucrative prospects to anyone. The kind of person who enters this field and stays in it is one whose primary motivation is concern for the suffering of those who cannot help themselves, a concern which accepts some diminution in personal ambition and which thrives on collegueship. It is characteristic of Dr Rees that in only a few of the numerous scientific papers that bear his name does he appear as the single author. He has consistently been the supporter and encourager of others, seeing most new discovery as essentially the result of team work, and though his personal contribution has been crucial he prefers to see his name in second or third place rather than first on the list of authors. It is part of his lifestyle not to seek the limelight, but to accept responsibility without hesitation.

This quality has been all important in maintaining the relevance of the Mill Hill unit to immediate issues. For leprosy workers across the world a visit to London was unthinkable without a visit to Dr Rees. The experience of the writer is surely typical, that a morning spent with Dick Rees was the most memorable and stimulating event of one's leave, always opening up some exciting possibility for future work on return to one's station overseas.

A succession of leprosy workers have been helped to gain precious experience in Dr Rees' department. One of the first was Dr B R Chatterji, observer of some growth of *M. leprae* in hybrid mice, and granted a Fellowship to Mill Hill where his work could be assessed against the impeccable laboratory conditions there.

So as Dr Rees comes to the formal point of retirement, a host of friends and

colleagues will want to unite both in expressing their admiration for all that he has been able to accomplish, and wishing him continuing happiness and fulfilment in the years ahead. It would be an irreparable loss if retirement was allowed to signal a withdrawal from the leprosy scene; rather let us anticipate that in a situation of greater relaxation, his penetrating mind and practical wisdom will continue to be addressed to the changing problems of leprosy, to advise and encourage leprologists everywhere. Certainly it can be said that as a result of his life's work, leprology, and indeed leprosy itself, will never be the same again. His friends across the world rejoiced when in 1980 he received the honour of Commander of the Order of St Michael and St George. Perhaps he himself took even greater pleasure in the award to him the same year of the Manson Medal of the Royal Society of Tropical Medicine and Hygiene, the Society's highest mark of distinction. In writing of Dr Rees' retirement, Professor Jagadisan referred to him as 'this outstanding medical scientist who is so eminently human and humane'. That just about says it all.

T F DAVEY